

Amendments to the Claims:

The following Listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) An illumination device comprising:
a light guide including a light guide core having an optically smooth surface for propagating light therethrough and a light emitting region extending along a portion of the core wherein said light guide is a light fiber, the light emitting region including:
at least one light extraction structure located along the optically smooth surface of the light guide core, said light extraction structure including an optically reflective surface extending into the light guide core and oriented to reflect light at an angle less than a critical angle necessary for light to propagate through the light guide core; and
a diffuse reflective material disposed around at least a portion of the light guide to direct at least a portion of the light reflected by the light extraction structure back through the light guide core so that light is emitted through the light emitting region of the optically smooth surface.
2. (Cancelled)
3. (Previously Presented) The device of claim 1 wherein said light guide has a circular cross-sectional shape.
4. (Cancelled)
5. (Previously Presented) The device of claim 1 further comprising a plurality of light extraction structures distributed along the optically smooth surface of the light guide core.
6. (Previously Presented) The device of claim 5 wherein the plurality of light extraction structures are equally spaced apart from one another along the optically smooth surface.

7. (Previously Presented) The device of claim 5 wherein the plurality of light extraction structures are unequally spaced apart from one another along the optically smooth surface.

8. (Previously Presented) The device of claim 1 wherein said light guide is formed from a polymerizable material.

9. (Previously Presented) The device of claim 8 wherein said polymerizable material is an acrylate material.

10. (Previously Presented) The device of claim 9 wherein said polymerizable material is a urethane material.

11. (Previously Presented) The device of claim 1 further comprising a cladding material surrounding the light guide core.

12. (Previously Presented) The device of claim 11 wherein the diffuse reflective sheet material is disposed around a portion of the cladding.

13. (Previously Presented) The device of claim 1 wherein the diffuse reflective sheet material comprises a polymeric material.

14. (Previously Presented) The device of claim 1 wherein the diffuse reflective sheet material comprises a microvoided material.

15. (Previously Presented) The device of claim 1 wherein the diffuse reflective sheet material is a material formed by thermally induced phase separation.

16. (Previously Presented) The device of claim 1 wherein the diffuse reflective material comprises a microporous material.

17. (Previously Presented) The device of claim 16 wherein the microporous material comprises polytetrafluoroethylene.

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (New) An illumination device comprising:

a light guide including a light guide core having an optically smooth surface for propagating light therethrough, a cladding surrounding said core, and a light emitting region extending along a portion of the core, the light emitting region including:

at least one light extraction structure located along the optically smooth surface of the light guide core, said light extraction structure including an optically reflective surface extending into the light guide core and oriented to reflect light at an angle less than a critical angle necessary for light to propagate through the light guide core; and

a diffuse reflective material disposed around at least a portion of the light guide to direct at least a portion of the light reflected by the light extraction structure back through the light guide core so that light is emitted through the light emitting region of the optically smooth surface.

22. (New) The device of claim 21 wherein said light guide is a light fiber.

23. (New) The device of claim 21 wherein said light guide has a circular cross-sectional shape.

24. (New) The device of claim 1 wherein said light guide is a planar light guide.

25. (New) The device of claim 21 further comprising a plurality of light extraction structures distributed along the optically smooth surface of the light guide core.

26. (New) The device of claim 25 wherein the plurality of light extraction structures are equally spaced apart from one another along the optically smooth surface.

27. (New) The device of claim 25 wherein the plurality of light extraction structures are unequally spaced apart from one another along the optically smooth surface.

28. (New) The device of claim 21 wherein said light guide is formed from a polymerizable material.

29. (New) The device of claim 28 wherein said polymerizable material is an acrylate material.

30. (New) The device of claim 29 wherein said polymerizable material is a urethane material.

31. (New) The device of claim 21 wherein the diffuse reflective sheet material is disposed around a portion of the cladding.

32. (New) The device of claim 21 wherein the diffuse reflective sheet material comprises a polymeric material.

33. (Previously Presented) The device of claim 21 wherein the diffuse reflective sheet material comprises a microvoided material.

34. (New) The device of claim 21 wherein the diffuse reflective sheet material is a material formed by thermally induced phase separation.

35. (New) The device of claim 21 wherein the diffuse reflective material comprises a microporous material.

36. (New) The device of claim 35 wherein the microporous material comprises polytetrafluoroethylene.